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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,047	09/03/2003	Sze-Kc Wang	OTMP0053USA	2046

27765 7590 12/18/2003

NAIPO (NORTH AMERICA INTERNATIONAL PATENT OFFICE)
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

DALAKIS, MICHAEL

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,047

Applicant(s)

WANG, SZE-KE

Examiner

Michael Dalakis

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact and includes many grammatical errors, too numerous to mention individually. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. It appears that the specification is a poor translation to English resulting in the high number of unclear and inexact terms and grammatical errors.

Claim Objections

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 4-8, 10, 12-15 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The aforementioned claims include language that the Examiner cannot understand. The claim language appears to be an imprecise translation into English. In claims 4-7, the terms "transmissivity position of cut out" and "transmissivity

position of cut in” are unclear and indefinite as to their meaning. In claim 8, the limiting term “around” is vague and indefinite. In claim 10, it is unclear and indefinite how a driver can be “manual”. In claims 12-14, the term “frequency of moving” is unclear and indefinite. In claim 15, the term “keeps out” is vague and indefinite. In claim 18, the phrase “is a color wheel form which has at least one yellow filter segment and the other is transparent segment” lacks antecedent basis and is unclear and indefinite”. In claim 19, the phrase “can coat an anti-reflection” is unclear and indefinite. Finally, in claim 20, the phrase “a long plank upon which has at least one yellow filter segment” is unclear and indefinite.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson (US Patent 6,155,687) in view of Belliveau et al. (US Patent 5,980,066). Peterson discloses all that is claimed except for a yellow filter segment for filtering out yellow light transmitted with red and green light after blue light is removed.

More specifically, Peterson discloses a projection system comprising a mercury (metal halide) high pressure lamp 112, a color generation assembly 120 (color wheel) having a red, blue and green filter to filter the light beam from lamp 112 and integration rod 122 and a projector screen (not shown but disclosed in column 4, lines 57-60).

Belliveau discloses a lighting system that may be used with projector lenses to form images (column 1, lines 21-24). The lighting system includes a conventional color wheel 89 and a yellow filter wheel 86y (also interpreted as a plank or a band-cut filter) that is selectively driven in and out of the light path to filter yellow light out of the light beam exiting color wheel 89. A conventional color wheel includes a red, blue and green filter (as described by Peterson). Green light has a wavelength of greater than 578nm and includes yellow light. Red light has a wavelength of less than 578nm and includes yellow light. Yellow light falls between the red and green wavelengths at approximately 578nm. Therefore, in Belliveau, the color wheel 86 transmits green and red light and filter wheel 86y filters the yellow light out of these light beams. The filter wheel 86y includes transparent segments 305 and 307 (Figure 6), is disposed immediately behind color wheel 89 (Figure 3) and is driven in and out of the light path as desired by motor 82.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the yellow filtering element of Belliveau immediately downstream of the color wheel in the projection system of Peterson for the purpose of providing selective filtering of yellow light for different projection applications.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The applicant should take note of the disclosure of Plummer et al., disclosing a filter band 20 having yellow segments thereon.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Dalakis whose telephone number is 703.305.4021. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.872.9317.

MD
December 9, 2003


RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800